

REMARKS

Claims 1-4 were previously cancelled. Thus, claims 5-9 remain pending.

Claims 5-9 stand rejected under 35 U.S.C. 102(b) as being anticipated by US patent application publication No. 2004/0162638 (hereinafter Solomon). Claims 10-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Solomont in view of US patent application publication No. 2002/0136260 (hereinafter Ma). Applicant respectfully requests reconsideration of the rejections and allowance of the present application in view of the foregoing amendments and the following remarks.

Independent claims 5 and 10 have been amended to emphasize aspects of the present invention.

Claim 5 is directed to a method for the operation of a technical system. Claim 5 in part recites determining an operating mode or functional mode of the technical system from the temporal behavior the operating parameters using any of various artificial intelligence techniques. Claim 5, as amended, recites that the determining of the operating or functional mode of the technical system from the temporal behavior the operating parameters is performed with no model of the technical system. Basis for this amendment may be found at least in the last two lines of paragraph 13, and the last two lines of paragraph 16 of the US patent application publication of the present invention. Applicant notes that M.P.E.P. 2173.05(i) states that the current view of the courts is that there is nothing inherently ambiguous or uncertain about a negative limitation.

MPEP §2131 provides that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. The identical invention must be shown in as complete detail as contained in the claim. The elements must be arranged as required by the claim.

Solomon is directed to self-organizing mobile robotic agents (MRAs in a multi-robotic system (MRS). The MRS of Solomon is a model-based system. Solomon's disclosure is replete with references to this basic requirement of Solomon and a few examples that should suffice are listed below.

Paragraph 28 of Solomon: By decentralizing numerous functions in *a distributed architecture model*, groups of autonomous robotic agents can learn together . . .

Paragraph 37 of Solomon: The "Harness" dynamic *reconfigurable metacomputing model* is a pioneer for this mobile self-organizing MRS hybrid approach . . .

Paragraph 40 of Solomon: Such *a hybrid model* allows for adaptation . . .

Paragraph 41 of Solomon: Why, then, cannot an MRS be developed that emulates, and even transcends, the performance of the animal (and insect) *group model*?

Paragraph 42 of Solomon: First, the application of *Grid computing models* provides an appropriate distributed model for maximizing computation capacity by sharing resources among MRAs in real-time. *This model* can be scalable so that new MRAs can be added . . .

Paragraph 45 of Solomon: Towards a *Hybrid MRS AI Model* . . .

Paragraph 49 of Solomon: Two main *problem solving models* involve . . .

Accordingly, Solomon fails to describe or suggest that the determining of the operating or functional mode of the technical system is performed with no model of the technical system, as set forth in claim 5. Anticipation under 35 U.S.C. §102 requires that "The identical invention must be shown in as complete detail as contained in the ...claim." (Citations omitted) Accordingly, it is submitted that Solomon fails to anticipate or otherwise render unpatentable claim 5 (and claims depending there from) and this basis of rejection should be withdrawn.

In connection with independent claim 10, it is respectfully noted that Ma fails to remedy the deficiencies of Solomon noted above in connection with the claimed invention. Consequently, claim 10, (and claims depending there from) are not rendered obvious by the Solomon/Ma combination, and this basis of rejection should also be withdrawn.

Conclusion


It is respectfully submitted that each of the claims pending in this application recite patentable subject matter, and it is further submitted that such claims comply with all statutory requirements and thus each of such claims should be allowed.

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

Dated: 5/19/18

By: _____


John P. Musone
Registration No. 44,961
(407) 736-6449

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, New Jersey 08830